MasterColor® Ceramic Metal Halide

ED-17 Lamps

Ideal for general lighting, downlighting, and flood lighting

- **Excellent Color Rendering**
  82–85 for 3K; 92 for 4K
- **Superior Color Stability Over Life**
  –Within ± 200K
- **Lamp to Lamp Color Consistency Over Life**
- **Higher Lumen Maintenance**
  –Improved lumen maintenance over standard metal halide
- **Total Cost of Ownership Benefits**
  –High lamp efficacy (up to 93 LPW)
  –Energy-efficient alternative to incandescent/halogen
  –Operates on existing ballasts
- **FadeBlock™**
  –Lamps feature integrated UV blocking medium for reduced fading of fabrics and paintings
  –Available only on protected ED-17P lamps
- **Environmentally Responsible TCLP* Compliant ALTO® Lamp Technology**
  Passes EPA's TCLP test for non-hazardous waste

** The TCLP is the US EPA's Toxicity Characteristic Leaching Procedure.*

Alto
The Newest Addition to the ALTO Family of Lamps

Visit our website at www.mastercolor.com

PHILIPS

Philips Lighting Company
200 Franklin Square Drive ▪ P.O. Box 6800
Somerset, NJ 08875-6800
1-800-555-0050
www.lighting.philips.com/nam
A Division of Philips Electronics North America Corporation

Printed in USA 2/03 P-5432-C

Philips Lighting
281 Hillmount Road
Markham, Ontario
Canada L6C 2S3
1-800-555-0050
www.lighting.philips.com/nam
A Division of Philips Electronics Ltd.

MasterColor® ED-17 Lamps

Electrical, Technical and Ordering Data (Subject to change without notice)

Bulb Temperature (Maximum)	400°C (752°F)
Base Temperature (Maximum)	190°C (374°F)
RMS Lamp Operating Current (Amps) Nominal	0.58 (for 50W)
	0.8 (for 70W)
	1.1 (for 100W)
	1.8 (for 150W)
Lamp Current Crest Factor (Maximum)	1.8
Warm-up to 80% Full Brightness	2 minutes
Re-start Time for Hot Lamps	4–8 minutes
Base	Medium Screw
Operating Position	Universal
Standard Package Quantity	12

	Product Number	Ordering Code	Nom. Watts	ANSI Ballast Code	Bulb Size	Bulb Finish	MOL (In.)	LCL (In.)	Rated Average Life (Hrs.)	Rated Initial Lumens	Design Lumens	CRI	CCT
	360206	MHC50/U/M/3K ALTO	50	M148/M110/E	ED-17	CLEAR	5 7/16	3 7/16	10000	4,250	3200	85	3000
	360222	MHC50/C/U/M/3K ALTO	50	M148/M110/E	ED-17	COATED	5 7/16	-	10000	4,000	3000	85	3000
	368910	MHC50/U/MP/3K ALTO	50	M148/M110/O	ED-17P	CLEAR	5 7/16	3 7/16	10000	3500	2625	85	3000
	208843	MHC70/U/M/3K ALTO	70	M143/M98/E	ED-17	CLEAR	5 7/16	3 7/16	16000	6150	4551	85	3000
	208876	MHC70/C/U/M/3K ALTO	70	M143/M98/E	ED-17	COATED	5 7/16	-	16000	5600	4144	85	3000
3K	233668	MHC70/U/MP/3K ALTO	70	M143/M98/O	ED-17P	CLEAR	5 7/16	3 7/16	16000	5800	4292	85	3000
	233676	MHC70/C/U/MP/3K ALTO	70	M143/M98/O	ED-17P	COATED	5 7/16	-	16000	5350	3959	85	3000
	208884	MHC100/U/M/3K ALTO	100	M140/M90/E	ED-17	CLEAR	5 7/16	3 7/16	16000	9000	6750	85	3000
	208892	MHC100/C/U/M/3K ALTO	100	M140/M90/E	ED-17	COATED	5 7/16	-	16000	8500	6375	85	3000
	233684	MHC100/U/MP/3K ALTO	100	M140/M90/O	ED-17P	CLEAR	5 7/16	3 7/16	16000	8000	6000	85	3000
	234443	MHC100/C/U/MP/3K ALTO	100	M140/M90/O	ED-17P	COATED	5 7/16	-	16000	7500	5625	85	3000
	130229	MHC150/U/M/3K ALTO	150	M102/M142/E	ED-17	CLEAR	5 7/16	3 7/16	10000	14,000	10500	85	3000
	130237	MHC150/C/U/M/3K ALTO	150	M102/M142/E	ED-17	COATED	5 7/16	-	10000	12,500	9375	85	3000
	360230	MHC50/U/M/4K ALTO	50	M148/M110/E	ED-17	CLEAR	5 7/16	3 7/16	10000	3,750	2800	92	4000
	360248	MHC50/C/U/M/4K ALTO	50	M148/M110/E	ED-17	COATED	5 7/16	-	10000	3,500	2600	92	4000
	368936	MHC50/U/MP/4K ALTO	50	M148/M110/O	ED-17P	CLEAR	5 7/16	3 7/16	10000	3300	2475	92	4000
	281295	MHC70/U/M/4K ALTO	70	M143/M98/E	ED-17	CLEAR	5 7/16	3 7/16	20000	5600	3920	92	4000
	281337	MHC70/C/U/M/4K ALTO	70	M143/M98/E	ED-17	COATED	5 7/16	-	20000	5300	3710	92	4000
	360578	MHC70/U/MP/4K ALTO	70	M143/M98/O	ED-17P	CLEAR	5 7/16	3 7/16	20000	5400	3780	92	4000
4K	360594	MHC70/C/U/MP/4K ALTO	70	M143/M98/O	ED-17P	COATED	5 7/16	-	20000	5025	3517.5	92	4000
	281352	MHC100/U/M/4K ALTO	100	M140/M90/E	ED-17	CLEAR	5 7/16	3 7/16	20000	9,000	6750	92	4000
	281360	MHC100/C/U/M/4K ALTO	100	M140/M90/E	ED-17	COATED	5 7/16	-	20000	8500	6375	92	4000
	360602	MHC100/U/MP/4K ALTO	100	M140/M90/O	ED-17P	CLEAR	5 7/16	3 7/16	20000	8,000	6000	92	4000
	360610	MHC100/C/U/MP/4K ALTO	100	M140/M90/O	ED-17P	COATED	5 7/16	-	20000	7,500	5625	92	4000
	377200	MHC150/U/M/4K ALTO	150	M142/M102/E	ED-17	CLEAR	5 7/16	3 7/16	20000	13,500	10260	92	4000
	377218	MHC150/C/U/M/4K ALTO	150	M142/M102/E	ED-17	COATED	5 7/16	-	20000	12,500	9500	92	4000
	377242	MHC150/U/MP/4K ALTO	150	M142/M102/O	ED-17P	CLEAR	5 7/16	3 7/16	20000	12,400	9424	92	4000
	377267	MHC150/C/U/MP/4K ALTO	150	M142/M102/O	ED-17P	COATED	5 7/16	-	20000	11,500	8740	92	4000

Note: ⬡ Exclusive Philips Product ANSI Code: E = Enclosed Fixture Rated; O = Open Fixture Rated

RECOMMENDED WARNINGS, CAUTIONS & OPERATING INSTRUCTIONS

WARNING: "These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available." This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA:21CFR 1040.30 Canada: SOR/DORS/80-381).

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

WARNING: The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000° C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, **THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.**

Use ED-17 types in enclosed luminaires ONLY that are capable of withstanding particles of glass having temperatures up to 1000° C. ED-17P types are designed to retain all the glass particles should inner arc tube rupture occur.

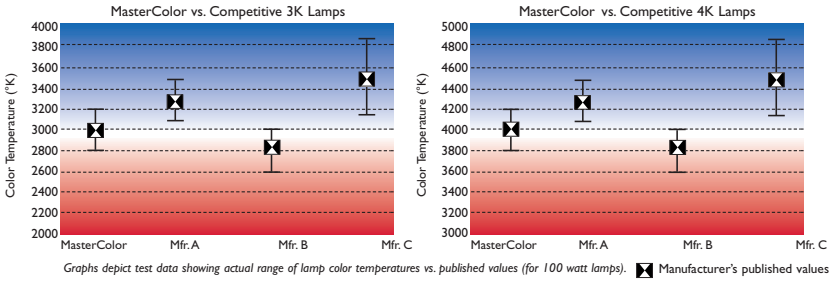
RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc-tube rupture. This lamp contains an arc tube with a filling gas containing Kr-85 and is distributed by Philips Lighting Company, a division of Philips Electronics North America Corporation, Somerset, New Jersey 08875-6800.

CAUTION: TO REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE RESULTING FROM AN ARC TUBE RUPTURE, THE FOLLOWING LAMP OPERATING INSTRUCTIONS MUST BE FOLLOWED.

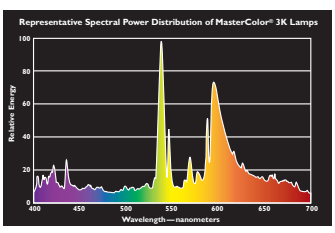
LAMP OPERATING INSTRUCTIONS:

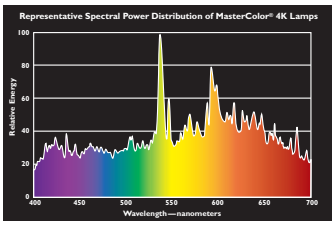
1) RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE. Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.
2) Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
3) Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer. A. Operate lamp only within specified limits of operation. B. For total supply load refer to ballast manufacturer's electrical data.
4) Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.
5) If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.
6) Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.
7) Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock, and color appearance may vary between individual lamps.
8) Lamps may require 4 to 8 minutes to re-light if there is a power interruption.
9) Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.

Superior Color Stability



Graphs depict test data showing actual range of lamp color temperatures vs. published values (for 100 watt lamps). ⋈ Manufacturer's published values





Dimensions (mm/in.)